REMARKS

The Examiner is thanked for indicating the allowance of Claims 1-7 and 9 -18.

The rejection of Claim 8 as being anticipated by Yamakado et al. under 35 USC §102(c) is, however, traversed. Reconsideration of that rejection is respectfully requested.

The Office Action generally characterizes the Yamakado et al. patent as teaching a fuel supply system which detects that the valve-opening current is not appropriate when the valve-opening current flowing through the solenoid is below a predetermined current value. In fact, however, this patent does not teach or even suggest detection that the valve-opening current is insufficient in order to allow the system to protect itself by diagnosing the fuel supply system and detecting an abnormality. Abnormality is not the focus of the Yamakado et al. fuel injector system, but maintaining injection volume linearity is.

More specifically, the Yamakado et al. patent discloses that the coil current is changed to holding current when the coil current reaches a set peak current value. As noted at column 10, lines 28 to 49 of the Yamakado et al. patent, the "operation of the power transistor 50 is controlled by the current control circuit 56 in conformity to the target peak current value or target switching time (target switching timing) determined by the above processing. In this case, while the coil current detected by the current detecting resistor 52 is lower than the target peak current value, or the time measured by the switching timing determining unit 76 has not yet reached the target switching time, the power transistor 50 is kept turned on by ON-signals coming from the current control circuit 56, and the battery voltage is continuously applied to coil 20 to increase the level of current sent to the coil. When the current flowing to the coil has reached the peak current value, or when the time which has elapsed after the start of the current application has reached the target switching time, the power transistor 50 is deactivated. Then, the power transistor 50 repeats on-off operations to obtain a holding current which is lower than the coil current value at the time point, thereby maintaining the current to be sent to coil 120 at the holding current valve. In other words, the holding current required to hold the valve 42 open is supplied to the coil 20." This is not a teaching or suggestion of having the fuel supply system diagnose a fuel injector abnormality when the time period from the start of the fuel injection pulse until the valve-opening current reaches a predetermined current value is less than a predetermined time period as set forth in Claim 8.

Accordingly, early and favorable action on Claim 8 is earnestly solicited.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #056208.52821US).

Respectfully submitted,

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